

## Position Indicator



The Actuonix Position Indicator provides remote visual feedback for all of our feedback type actuators. This is a simple way to add a visual display to your actuator system without modification of your design, or the addition of a custom controller or software.

Simply connect power, ground, and the feedback line to the Position Indicator and the indicator will begin to operate. This indicator is compatible with all -I and -P actuators, as well as the -P/LAC combination. NOTE: The black and red wires, and the yellow and orange wires must be reversed on the "P" actuator/LAC combination or display will also be reversed.

The LED bar graph lights proportionally to the actuators position. At full retraction, no LEDs are lit, and at full extension all of the LED's are lit. A trim potentiometer makes this display compatible with a wide range of feedback voltages. For power sensitive applications, remove the jumper and only a single LED will be used to indicate position.

### Benefits

- Compact miniature size
- Simple control
- Wide Input range
- Easy mounting

### Applications

- Robotics
- Hobby
- Automotive

### Connection Reference:

LAC	Indicator
X4 Pin 2 (P)	→ 1 – Red
X6 Pin 2 (+)	→ 2 – White
X6 Pin 1 (-)	→ 3 – Black

L12-I	Indicator
Pin 3 (Purple)	→ 1 – Red
Pin 5 (Red)	→ 2 – White
Pin 6 (Black)	→ 3 – Black

L12-P/L16-P/P16-P	Indicator
Pin 2 (Purple)	→ 1 – Red
Pin 1 (Orange)	→ 3 – Black

PQ12-P	Indicator
Pin 5	→ 1 – Red
Pin 1	→ 3 – Black

\* For -P, the Indicator also requires connection to Power and Ground (Unswitched side of Motor Supply)

### Position Indicator Specifications

	1 LED Mode	10 LED Mode
Supply Voltage	3-24VDC*	3-15VDC
Maximum Current Required	11mA	75mA
Input Voltage Range	0-30VDC **	
Storage Temperature	-40°C to 150°C	
Operating Temperature	0°C to +70°C	
Input Impedance	5 Mega Ohm	

\* Supply noise over 35V may damage the display.

\*\*For Input voltages over 30V, ensure the potentiometer is fully counter-clockwise before you calibrate. Input damage can occur if the potentiometer is adjusted too low.

1 - Fahrenheit[F] =1.8Celsius[C] +32  
2 - Inches["]=Millimeters[mm]/25.4

### Pin Out:

WIRING: (see last page for pin numbering)

- 1 - Red – Position Input Signal
- 2 - White – Power (DC)
- 3 - Black – Ground

*Colour coding may differ on pre-2015 units*

### Operation:

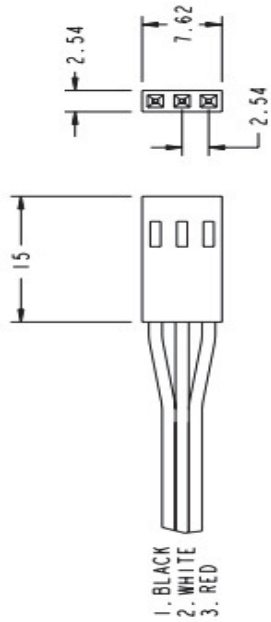
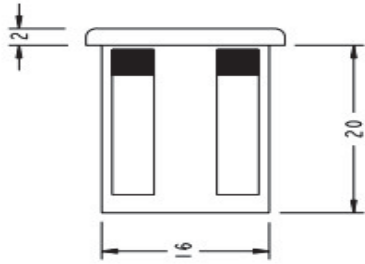
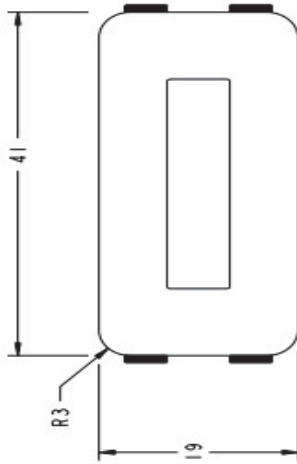
Calibrate the indicator by first positioning the actuator for maximum feedback signal(For -P this is extended, for -I this is retracted). Adjust the potentiometer so that all 10 LEDs are lit.

Remove the jumper for 1 LED operation, or leave the jumper connected for 10 LED operation. For the lowest power usage, install a switch between the red wire and the power supply.

*Most applications require removal of the connector and baring of the wires.*

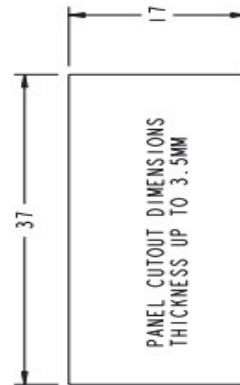
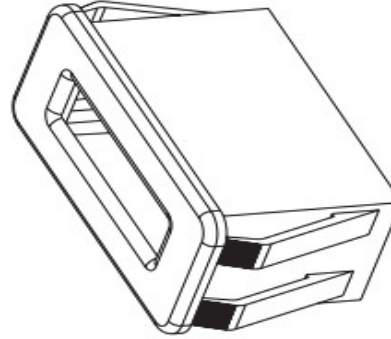
**Note:** Reversing the polarity of pins 2 and 3 may permanently damage the Indicator.

All information provided on this datasheet is in accordance with our terms and conditions as posted here: <http://actuonix.com/terms.asp>



SCALE 2:1

WIRING CONNECTOR  
MATING PIN HEADER 0.1" PITCH



SIZE	SCALE	PART NUMBER	REV
B	2:1	LED BAR GRAPH	A
FILE HOUSING..10350			SHEET 1 OF 1